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| Substitute Form PTO-1449 (Modified) Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b)) | U.S. Department of Commerce Patent and Trademark Office | | Attorney's Docket No. 07917-083002 | Application No. 09/824,358 |
| | Applicant Michael R. Green et al. | | | |
| | Filing Date 4/20/01 | Group Art Unit 1632 | | |

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U.S. Patent Documents

| Examiner Initial | Desig. ID | Patent Number | Issue Date | Patentee | Class | Subclass | Filing Date If Appropriate |
|------------------|-----------|---------------|----------------|---------------|-------|----------|----------------------------|
| AmB | | 5,741,679 | April 21, 1998 | George et al. | | | |
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Foreign Patent Documents or Published Foreign Patent Applications

| Examiner Initial | Desig. ID | Document Number | Publication Date | Country or Patent Office | Class | Subclass | Translation | |
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Other Documents (include Author, Title, Date, and Place of Publication)

| Examiner Initial | Desig. ID | Document |
|------------------|-----------|--|
| AmB | AA | Amara, J.F. et al., "A versatile synthetic dimerizer for the regulation of protein-protein interactions," Proc. Natl. Acad. Sci. USA, 94 10618-10623 (1997) |
| | AB | Arigoni et al., "A Genome-based approach for the identification of essential bacterial genes," Nature Biotechnology, 16: 851-856 (1998) |
| | AC | Bartel and Szostak, "Isolation of New Ribozymes from a Large Pool of Random Sequences," Science, 261: 1411-1418 (1993) |
| | AD | Beaudry and Joyce, "Directed Evolution of an RNA Enzyme," Science, 257, 635-641 (1992) |
| | AE | Conrad et al., "In vitro selection methodologies to probe RNA function and structure," Molecular Diversity, 1: 69-78 (1995) |
| | AF | Ellington and Conrad, "Aptamers as potential nucleic acid pharmaceuticals," Biotechnology Annual Review, 1: 185-214 (1995) |
| | AG | Ellington et al. "In vitro selection of RNA molecules that bind specific ligands," Nature, 346:818-822 (1990) |
| | AH | Ellington, A.D. "Aptamers achieve the desired recognition: In vitro selection procedures can generate RNA molecules, known as aptamers, ..." Current Biology, 4: No. 5: 427-429 (1994) |
| | AI | Famulok, M., Molecular Recognition of Amino Acids by RNA-Aptamers: An L-Citrulline Binding RNA Motif ..., J. Am. Chem. Soc., 116:1698-1706 (1994) |
| | AJ | Friedmann, T. "Overcoming the obstacles to gene therapy," Sci. Am. June 1997, 96-101 |
| AmB | AK | Gold, L. "Oligonucleotides as research, diagnostic, and therapeutic agents," J. Biol. Chem., 270, No. 23 13581-13584, (1995) |

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|--|----------------------------|
| Examiner Signature <i>Anne-Marie Baker</i> | Date Considered 3/22/01 |
| EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | |

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|--|-----------|---|
| Examiner Initial | Desig. ID | Document |
| AMB | AL | Good et al., "Expression of small, therapeutic RNAs in human cell nuclei," Gene Therapy, 4:45-54 (1997) |
| ↓ | AM | Gossen et al. "Tight control of gene expression in mammalian cells by tetracycline-responsive promoters," Proc. Natl. Acad. Sci. USA, 89:5547-5551 (1992) |
| | AN | Gottesfeld et al., "Regulation of gene expression by small molecules," Nature, 387: 202-205 (1997) |
| | AO | Green and Szostak, "Selection of a ribozyme that functions as a Superior Template in a Self-Copying Reaction," Science, 258:1910-1915 (1992) |
| | AP | Green et al., "In vitro genetic analysis of the Tetrahymena self-splicing intron," Nature, 347:406-408 (1990) |
| | AQ | Jellinek et al., "High-affinity RNA ligands to basic fibroblast growth factor inhibit receptor binding," Proc. Natl. Acad. Sci. 90:11227-11231 (1993) |
| | AR | Joyce, Gerald F., "Amplification, mutation and selection of catalytic RNA," Gene, 82:83-87 (1989) |
| | AS | Keenan et al., "Synthesis and activity of Bivalent FKBP12 Ligands for the regulated dimerization of proteins," Bioorganic & Medicinal Chemistry, 6:1309-1335 (1998) |
| | AT | Kenan et al., "Exploring molecular diversity with combinatorial shape libraries," TIBS 19:57-64 (1994) |
| | AU | Klug and Famulok, "All you wanted to know about SELEX," Mol. Biol. Reports 20: 97-107 (1994) |
| | AV | Lato et al., "In vitro selection of RNA lectins: using combinatorial chemistry to interpret ribozyme evolution," Current Biology, 2:291-303 No. 5 (1995) |
| | AW | Lehman et al., "Evolution In Vitro of an RNA Enzyme with Altered Metal Dependence," Nature 361:182-185, 1993 |
| | AX | Liu et al., "Differential Evolution of Substrates for an RNA Enzyme in the Presence and Absence of Its Protein Cofactor," Cell, 77:1093-1100 (1994) |
| | AY | Liu et al., "Sequence-selective Carbohydrate-DNA Interaction: Dimeric and Monomeric Forms of the Calicheamicin Oligosaccharide Interfere with....," Proc. Natl. Acad. Sci. USA, 93:940-944, 1996. |
| | AZ | No et al., "Ecdysone-inducible Gene Expression in Mammalian Cells and Transgenic Mice," Proc. Natl. Acad. Sci. USA 93:3346-3351 (1996) |
| | AAA | Orkin and Motulsky, "Report and recommendations of the panel to assess the NIH investment in research on gene therapy," December 7, 1995:1-41 |
| | ABB | Pan et al., "In Vitro Selection of RNAs That Undergo Autolytic Cleavage with PB ²⁺ ," Biochemistry 31:3887-3895, (1992) |
| | ACC | Schneider et al., Selection of High Affinity RNA Ligands to the Bacteriophage R17 Coat Protein," J. Mol. Biol. 228:862-869, (1992) |
| | ADD | Spencer et al., "Controlling Signal Transduction with Synthetic Ligands," Science 262:1019-1024, (1993) |
| | AEE | Tuerk et al., "In Vitro Evolution of Functional Nucleic Acids: High-affinity RNA Ligands of HIV-1 Proteins," Gene 137:33-39, (1993) |
| ↓ | AFF | Tuerk et al., "RNA Pseudoknots That Inhibit Human Immunodeficiency Virus Type 1 Reverse Transcriptase," Proc. Natl. Acad. Sci. USA, 89:6988-6992, (1992) |
| AMB | AGG | Tuerk et al., "Systematic Evolution of Ligands by Exponential Enrichment: RNA Ligands to Bacteriophage T4 DNA Polymerase," Science, 249:505-510, (1990) |
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| Examiner Initial | Desig. ID | Document |
| AMB ↓ | - AHH | Uphoff et al., "In Vitro Selection of Aptamers: The Dearth of Pure Reason," Current Biology, 6:281-287, (1996) |
| | - AII | Verma et al., "Gene therapy – promises, problems and prospects," Nature. 389, 239-242, (1997) |
| | - AJJ | Wall, R.J., "Transgenic livestock: Progress and prospects for the future," Theriogenology, 45:57-68, (1996) |
| | - AKK | Wallis et al., "The Binding of Antibiotics to RNA," Prog. Biophys, Molec. Biol. 67:141-154, (1997) |
| | - ALL | Wang et al., "Specific binding of aminoglycoside antibiotics to RNA," Chemistry & Biology, 2, 5:281-290 (1995) |
| AMB | - AMM | Werstuck et al., "Controlling gene expression...", Science, 282:296-298, (1998) |

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